ATS WATER TECHNOLOGY

PRODUCT INFORMATION
LEWATIT® S 6268

Lewatit®

Lewatit® S 6268 is a food grade, gelular, monodisperse, strongly basic (type I) anion exchange resin based on a styrene-divinylbenzene copolymer. On account of its special gel matrix with an integrated high porosity and special features such as outstanding capacity, demineralization of waters with high organic load or decolorization of sugar (cane or beet) solutions are the preferred applications. Further, the higher thermal stability in comparison to acrylic resins and the outstanding physical and osmotic stability gives **Lewatit® S 6268** an additional advantage. The optimized kinetics increase the operating capacity, in comparison with ion exchange resins of heterosdisperse bead size distribution.

Lewatit® S 6268 (in its hydroxide form) is especially suitable for the removal of acid and simultaneous decolorisation of solutions of organic substances, e. g. sugar, gelantine, glycerine, grape must, whey, fruit concentrates etc....

Lewatit® S 6268 (in its chloride form) is especially suitable for:

- the decolorization of sugar syrup (beet or cane), glycerine, grape must, fruit juices
- organic traps (scavengers) used for the treatment of waters containing high concentrations of organics

Lewatit® S 6268 adds special features to the resin bed:

- high flow rates during regeneration and loading
- good utilization of the total capacity
- low demand for rinse water
- homogeneous throughput of regenerants, water and solutions, resulting in a homogeneous operating zone
- virtually linear pressure drop gradients across the entire bed depth, allowing operation with higher bed depths
- good separation of the components in mixed bed applications

When using **Lewatit® S 6268** to treat potable water and the aqueous solutions listed above, special care should be given to the initial cycles of the new resin. Please refer to the recommended start-up conditions available on request.

The special properties of this product can only be fully utilized if the technology and process used correspond to the current state-of-the-art. Further advice in this matter can be obtained from Lanxess Corporation.

Common Description

Delivery form	Cl^-
Functional group	Quaternary ammonium Type 1
Matrix	Styrenic
Structure	Gel
Appearance	Yellow, translucent

Specified Data

		US Units			
Uniformity coefficient				max.	1.1
Mean bead size	d50			mm	0.57-0.67
Total capacity (delivery form)		kgr/ft³	26	min. eq/L	1.2

Typical Physical and Chemical Properties

		US Units		Metric Units	
Bulk density for shipment	(+/- 5%)	lb/ft³	43	g/L	690
Density				approx. g/mL	1.1
Water retention (delivery form)				approx. weight %	48-55
Volume change (Cl^- -OH^-)				max. approx. %	25
Stability pH range					0-14
Stability temperature range				°C	1-90 (Cl)
Storage time (after delivery)				min. years	2
Storability temperature range				°C	-20 - +40

Operation

		US Units		Metric Units	
Operating temperature		max. °F	194 (Cl); 158(OH)	max. °C	90 (Cl); 70(OH)
Operating pH range	during exhaustion				0-12
Bed depth for single column		min. inches	31	min. mm	800
Back wash bed expansion per m/h (20°C)				%	11
Specific pressure loss (15°C)				kPa*h/m²	1
Max. pressure loss during operation		PSI	29	kPa	200
Specific flow rate		max. gpm/ft3	0.63	max. BV/h	5
Freeboard	during backwash			min. vol. %	80-100

Regeneration

		US Units		Metric Units	
NaCl regeneration	concentration	approx. wt. %	10	approx. wt. %	10
NaCl regeneration	quantity co-current	min. lb/ft³	12.5	min. g/L resin	200
NaCl regeneration	quantity counter-current	min. lb/ft³	12.5	min. g/L resin	200
NaOH regeneration	concentration	approx. wt. %	2-6	approx. wt. %	2-6
NaOH regeneration	quantity co-current	min. lb/ft³	5.6	min. g/L resin	90
NaOH regeneration	quantity counter-current	min. lb/ft³	3.1	min. g/L resin	50
NaCl/NaOH regeneration	concentration	approx. wt. %	10/1-2	approx. wt. %	10/1-2
NaCl/NaOH regeneration	quantity co-current	min. lb/ft³	12.5/1.3	min. g/L resin	200/20
NaCl/NaOH regeneration	quantity counter-current	min. lb/ft³	12.5/1.3	min. g/L resin	200/20
Regeneration contact time		min. minutes		min. minutes	30
Slow rinse at regeneration flow rate		min. gal/ft³	15	min. BV	2
Fast rinse at service flow rate		min. gal/ft³	30	min. BV	4

Additional Information & Regulations

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE OF PRODUCTS MENTIONED HEREIN IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING ANY PRODUCT, ALWAYS READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION.

Safety precautions
Strong oxidants, e.g. nitric acid, can cause violent reactions if they come into contact with ion exchange resins.

Disposal
In the European Community Ion exchange resins have to be disposed, according to the European waste nomenclature which can be accessed on the internet-site of the European Union.

Storage conditions
It is recommended to store ion exchange resins at temperatures above the freezing point of water under roof in dry conditions without exposure to direct sunlight. If resin should become frozen, it should not be mechanically handled and left to thaw out gradually at ambient temperature. It must be completely thawed before handling or use. No attempt should be made to accelerate the thawing process.

Storage time
The recommended storage time for this product is explained in the technical document “Technical guidelines on the storage of Lewatit® ion exchange resins” available for download on our website. Please use the following link for more information: https://lanxess.com/en/products-and-brands/brands/lewatit/literature

Packaging
The experience has shown that the packaging stability for reliable resin containment is limited to 24 months under the storage conditions described within the product safety information. It is therefore recommended to use the product within this time frame; otherwise the packaging condition should be checked regularly.

The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by us. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance, and information.

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